CUSTOMER NO.: 24498
Serial No.: 10/043,540
RCE Reply to Final Office Action dated: 07/12/07
Preliminary Amendment Dated: 10/09/07

PATENT
PU020013

Remarks/Arguments

The Final Office Action mailed July 12, 2007 has been reviewed and carefully considered. The Examiner's reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claims 1-4, 7-13 and 16-19 are pending in the present application. Claims 1 and 11 have been amended. Claims 5-6 and 14-15 have been cancelled without prejudice.

§102 REJECTIONS

By the Office Action, claims 1-4, 7-13 and 16-19 were rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,745,696 to Mendelson et al. (hereinafter Mendelson).

Applicant respectfully traverses the rejection.

Claims 1 and 11 have been amended to recite, *inter alia*, "...the network control system configured for increasing the data rate of the data stream to the customer premise unit from the server for a period of time when the physical layer is restored..." Support for this amendment is provided in the specification, e.g., on page 9, lines 17-25.

Responsive to the Examiner's request for the Applicant to point out the patentable novelty over the references cited that would overcome the 102(b) rejection, it is respectfully asserted that the network control system (NCS 11 in FIG. 1) configured for increasing the data rate between the server and the CPE as taught according to the present invention is not shown in the cited reference and is believed to be novel in view of same.

Indeed, as the Examiner has affirmed in the Office Action, in Mendelson "[T]ransport streams x, y and z must be delivered at a controlled rate between the server (11) and the buffers (711)." The Examiner goes on to cite Col. 1, lines 55-67 of Mendelson for support, which recites, in part, "[G]reat care must be taken in delivering the transport stream to the customer premises equipment at a rate which remains relatively **constant** with respect to the program's real time" (emphasis added). Therefore, clearly in Mendelson, what is meant by "**controlled**" rate is "**constant**" rate. This not only fails to disclose or suggest what is presently claimed,

6

but completely teaches away from the present invention. Further discussion is as follows:

Mendelson discusses transporting a transport stream 200 from the "source" server 110 to the "destination" CPE 122. The transport stream 200 is organized into a plurality of transport stream (TS) packets 210. Program timing information is encoded in program clock reference (PCR) fields 220. The PCRs 220 can be used to control the rate at which the TS stream is decoded to reconstruct the program in its original real time. If one of the TS packets 210 includes a PCR 220, the PCR 220 is transported at a predetermined location with respect to the beginning of the packet 210. In Mendelson, the problems which are addressed involve formatting the data of the TS packets 210 into the cells 300 so that server and network resources are minimized, and transporting the cells 300 to the CPE 122 with a minimum amount of jitter and wander.

PCRs may be transported in various TS packets 210. For example, FIG. 4 shows wherein only the second TS packet 212 transports a PCR 220. However, a first TS packet 211 may include a PCR. In such case, if the first TS packet 211 were to be transported as part of an eight cell PDU (protocol data unit), the CPE 122 cannot decode the first TS packet 211 until after the second TS packet 212 was received. This may cause jitter in the reconstructed program. Hence, in order to handle all cases of PCR distribution in the packets 210, the transport controller 700 in Mendelson conditions the timed program data independent of the transport rate to minimize wander and jitter.

FIG. 6 explains the conditioning of the timed program data. One implementation conditioning the transport stream uses a transport controller 700. However, the "controller 700" in Mendelson is not only unequivalent to but teaches away from the "network control system" of the present invention. Namely, according to one of Mendelson's inventive principles, while transporting portions of the transport stream 200 which consume less than the available transport bandwidth, the virtual transports "idle" cells. The idle or "null" cells ensure that constant bit rate transport is maintained. *See* Col. 6, lines 24-66. Again, in Mendelson, the maintenance of a **constant** transport rate is disclosed and emphasized. Mendelson fails to disclose or suggest at least a network control system configured for *increasing*

the data rate of the data stream to the customer premise unit from the server for a period of time when the physical layer is restored, essentially as claimed in claims 1 and 11. Thus, unlike Mendelson which maintains a constant data rate, according to one inventive aspect of the present invention the data rate of a data stream between the server and CPE may actually be altered (e.g., increased) in response to the loss and subsequent restoration of a physical layer.

As previously asserted, Mendelson is completely silent with respect to losing or restoring a physical layer and thus it logically follows that Mendelson can make no disclosure or mention of increasing the data rate of a data stream from the server to a CPE for a period of time when the physical layer is restored.

At least in light of the above arguments, it is respectfully asserted that claims 1 and 11 are allowable over Mendelson. Claims 2-4, 7-10 and 12-13, 16-19 depend either directly or indirectly on claims 1 and 11, respectively. As such, the Applicant respectfully submits that the dependent claims are patentable and nonobvious for at least the reasons given above for claims 1 and 11.

Accordingly, the Applicant respectfully requests withdrawal of all the rejections under 35 U.S.C. §102(b), and allowance of pending claims 1-4, 7-13 and 16-19 on the merits.

In view of the foregoing amendments and remarks, it is respectfully submitted that all the claims now pending in the application are in condition for allowance.

PATENT
PU020013

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that claims 1-4, 7-13 and 16-19 are patentable and nonobvious over the cited reference. Consequently, the Applicant respectfully requests reconsideration and withdrawal of the rejections and allowance of the application. Such early and favorable action is earnestly solicited.

No fees are believed to be due at this time. The office is hereby authorized to charge any additional fees which may be required in connection with this amendment and to credit any overpayment to our Deposit Account No.07-0832.

Respectfully submitted,

JOHN WILLIAM RICHARDSON

By: _____

Jeffrey D. Hale, Attorney for Applicant
Registration No. 40,012
(609) 734-6444

CORRESPONDENCE ADDRESS:

Patent Operations
Thomson Licensing Inc.
P.O. Box 5312
Princeton, NJ   08543-5312

October 9, 2007

9